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Amendments to the Claims

1. (CURRENTLY AMENDED) Control circuit ~~(2)~~ for controlling an electrical signal ~~(4)~~ over a load ~~(6)~~ such as a deflection circuit of a Cathode Ray Tube, comprising a first transistor ~~(8)~~ for switching the electrical signal ~~(4)~~ over the load ~~(6)~~, wherein the load ~~(6)~~ is coupled to a collector ~~(10)~~ and an emitter ~~(12)~~ of the first transistor ~~(8)~~, and wherein the control circuit ~~(2)~~ also comprises a resonance circuit ~~(14)~~ which is coupled to a basis ~~(16)~~ and the emitter ~~(12)~~ of the first transistor ~~(8)~~ for driving the first transistor ~~(8)~~, a power supply ~~(18)~~ which is coupled to the resonance circuit ~~(14)~~ for driving the resonance circuit ~~(14)~~, a pulse generating circuit ~~(20)~~ which is coupled to the power supply ~~(18)~~ and the resonance circuit ~~(14)~~, and a processing unit ~~(24)~~ with a memory unit ~~(26)~~, characterised in that, the memory unit ~~(26)~~ is arranged to be loaded with control information concerning predetermined states of the load ~~(6)~~ and corresponding predetermined optimal control adjustments of the power supply ~~(18)~~ and/or the pulse generating circuit ~~(20)~~, wherein the processing unit ~~(24)~~ is arranged for optimally controlling the electrical signal ~~(4)~~ by controlling the first transistor ~~(8)~~ via the power supply ~~(18)~~ and/or via the pulse generating circuit ~~(20)~~ for an actual state of the load ~~(6)~~ on the basis of the control information loaded in the memory unit ~~(26)~~.

2. (CURRENTLY AMENDED) Control circuit ~~(2)~~ for controlling an electrical signal ~~(4)~~ over a load ~~(6)~~ according to claim 1, characterised in that, the pulse generating circuit ~~(20)~~ is arranged for generating a pulse signal ~~(22)~~ for switching the first transistor ~~(8)~~ via the resonance circuit ~~(14)~~.

3. (CURRENTLY AMENDED) Control circuit ~~(2)~~ for controlling an electrical signal ~~(4)~~ over a load ~~(6)~~ according to ~~one of the preceding claims~~claim 1, characterised in that, the processing unit ~~(24)~~ is coupled to the power supply ~~(18)~~ for controlling the power supply ~~(18)~~.

4. (CURRENTLY AMENDED) Control circuit ~~(2)~~ for controlling an electrical signal ~~(4)~~ over a load ~~(6)~~ according to ~~one of the preceding claims~~claim 1, characterised in that the processing unit ~~(24)~~ is coupled to the pulse generating circuit

~~(20)~~ for controlling the pulse generating circuit ~~(20)~~, wherein the pulse generating circuit ~~(20)~~ is arranged for pulse-width modulation of the pulse signal ~~(22)~~.

5. (CURRENTLY AMENDED) Control circuit ~~(2)~~ for controlling an electrical signal ~~(4)~~ over a load ~~(6)~~ according to ~~one of the preceding claims~~claim 1, characterised in that, the pulse generating circuit ~~(20)~~ comprises a second transistor ~~(42)~~, a pulse generator ~~(44)~~ which is coupled to a basis and an emitter of the second transistor ~~(42)~~, and a transformer ~~(46)~~, wherein a first coil ~~(48)~~ of the transformer ~~(46)~~ is coupled to the power supply ~~(18)~~ and a collector of the second transistor ~~(42)~~, and wherein a second coil ~~(50)~~ of the transformer ~~(46)~~ is coupled to the resonance circuit ~~(14)~~.

6. (CURRENTLY AMENDED) Control circuit ~~(2)~~ for controlling an electrical signal ~~(4)~~ over a load ~~(6)~~ according to ~~one of the preceding claims~~claim 1, characterised in that, the resonance circuit ~~(14)~~ is an LCR-circuit.

7. (CURRENTLY AMENDED) Control circuit ~~(2)~~ for controlling an electrical signal ~~(4)~~ over a load ~~(6)~~ according to ~~one of the preceding claims~~claim 1, characterised in that, the processing unit ~~(24)~~ is a microprocessor and that the memory unit ~~(26)~~ is a digital EEPROM.

8. (CURRENTLY AMENDED) Method for adjusting a control circuit ~~(2)~~ for controlling an electrical signal ~~(4)~~ over a load ~~(6)~~ according to ~~one of the claims 1-7~~claim 1, characterised in that, the method at least comprises the steps of:
coupling the basis ~~(16)~~ and the emitter ~~(12)~~ of the first transistor ~~(8)~~ with factory measurement and control equipment;

coupling the processing unit ~~(24)~~ with factory measurement and control equipment;

adjusting the load ~~(6)~~ in an actual state of the load ~~(6)~~, wherein the actual state of the load ~~(6)~~ is one of the predetermined states of the load ~~(6)~~;

adjusting the power supply ~~(18)~~ of the control circuit ~~(2)~~ in a number of subsequent control adjustments of the power supply ~~(18)~~ for the actual state of the load ~~(6)~~ with the factory measurement and control equipment, wherein the factory

measurement and control equipment adjusts the processing unit ~~(24)~~, and wherein the processing unit ~~(24)~~ controls the power supply ~~(18)~~ in a number of control adjustments of the power supply ~~(18)~~;

measuring voltage response characteristics with the basis ~~(16)~~ and the emitter ~~(12)~~ of the first transistor ~~(8)~~ for each of the number of control adjustments of the power supply ~~(18)~~ for the actual state of the load ~~(6)~~ with the factory measurement and control equipment;

selecting an optimal control adjustment from the number of control adjustments of the power supply ~~(18)~~ for the actual state of the load ~~(6)~~ on the basis of the measured voltage response characteristics with the factory measurement and control equipment;

storing control information relating to the optimal control adjustment for the actual state of the load ~~(6)~~ in the memory unit ~~(26)~~ of the control circuit ~~(2)~~ with the factory measurement and control equipment.